

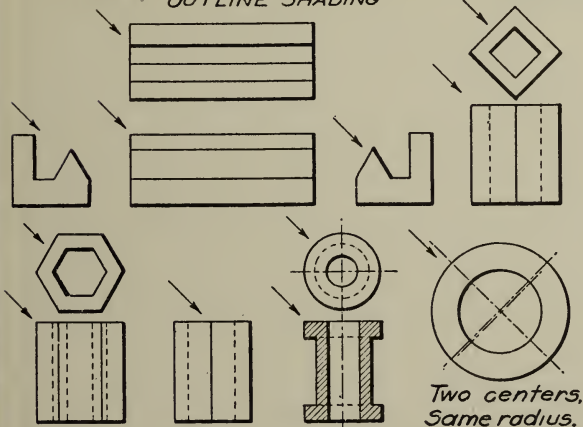
744
S. 5m
no. 1

MECHANICAL DRAWING CONVENTIONS

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SHADING

OUTLINE SHADING



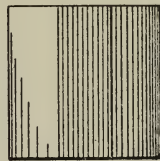
Two centers,
Same radius.

Right and bottom edges are made
shade lines in all projections.
Dotted lines and lines separating
two visible surfaces should not
be shaded. Light falls at 45°

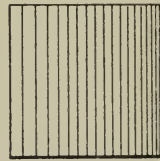
SURFACE SHADING



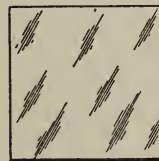
FLAT



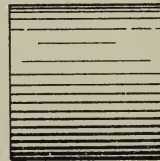
FLAT AND SLOPING



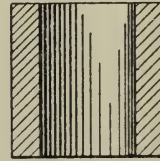
SLOPING



POLISHED.



CYLINDER



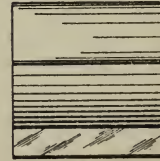
HOLLOW CYLINDER



CONE



SPHERE



CURVED AND FLAT

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 LINES AND THEIR USES
 STANDARD

*Used to represent the outline and all visible edges of an object.
 Also to represent given and required lines.*

----- DOTTED

Width $\frac{1}{2}$ standard. Dash and space each $\frac{1}{16}$ ".

Used to represent invisible edges. Also for constructions.

----- PROJECTION

*Width $\frac{1}{2}$ standard. Dash $\frac{3}{8}$ ". Space $\frac{1}{16}$ ". Used to represent
 projections between views, and for extensions to dimensions lines.*

----- CENTER

*Width $\frac{1}{2}$ standard. Dashes $\frac{1}{2}$ " and $\frac{1}{16}$ ". Space $\frac{1}{16}$ ". Used to represent centers,
 axes of projection and to show where sections have been taken.*

----- SHADE

Width 2 times standard. Used in shading for right and bottom edges.

----- BORDER

Width 3 times standard. Used for border of plates.

← $\frac{3}{4}$ " → DIMENSION

Width $\frac{1}{2}$ standard. Dash from $\frac{1}{2}$ " up. Space $\frac{1}{16}$ ". Used for dimensions.

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GOTHIC ALPHABET

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz 1234567890

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz 1234567890

Six strokes make all the letters.

<i>1/</i>	<i>Used in letters</i>	<i>BDEFHIKLMNPRT</i>	<i>bdhklpt aimnr 145</i>	<i>Compare</i>
-----------	------------------------	----------------------	--------------------------	----------------

<i>=</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>ABDEFHLPRZ</i>	<i>eftz 2457</i>
----------	----------	----------	----------	-------------------	------------------

<i>1/ \</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>AKMNQRVWXYZ</i>	<i>kvwxyz 7</i>
-------------	----------	----------	----------	--------------------	-----------------

<i>()</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>BCDGO PQR</i>	<i>abcdegopq 356890</i>
------------	----------	----------	----------	------------------	-------------------------

<i>1/ f l</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>JU fgj qy</i>
---------------	----------	----------	----------	------------------

<i>S</i>	<i>"</i>	<i>"</i>	<i>"</i>	<i>S s</i>
----------	----------	----------	----------	------------

<i>cecececece</i>	<i>nhnhnh</i>	<i>llllllll</i>	<i>kkkkkk</i>	<i>Do not shade.</i>
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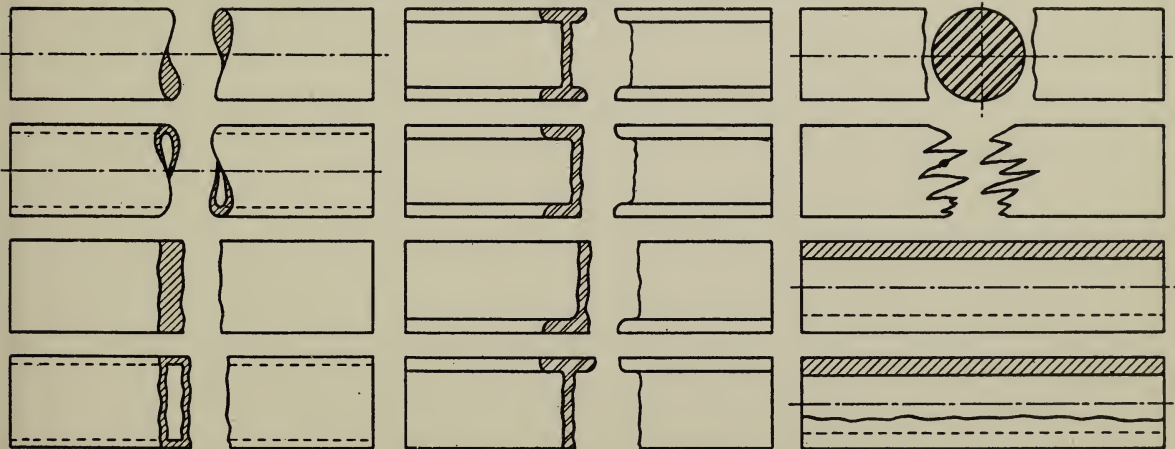
*In words, the area of the space between letters is always the same.**In sentences the space between words is the size of one letter.*

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METHOD OF SHOWING BREAKS



To better illustrate or to save space on the drawing a portion of the object is sometimes broken away. If possible the break should show the shape of the object and be crosshatched to show the kind of material of which it is made.

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CROSSHATCHING



CAST IRON



WROUGHT IRON



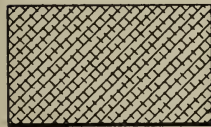
STEEL



WROUGHT STEEL



BRASS



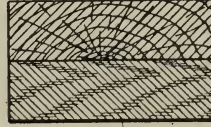
COPPER



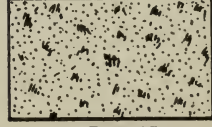
BABBITT



VULCANITE



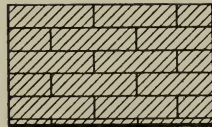
WOOD



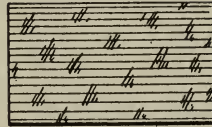
LEATHER



STONE



BRICK



EARTH



CEMENT



LIQUID

In a section or a drawing showing an imaginary cut surface that surface is crosshatched to show the kind of material. The width of the lines and the distance between them varies with the size of the surface. Objects touching are crosshatched in opposite directions.

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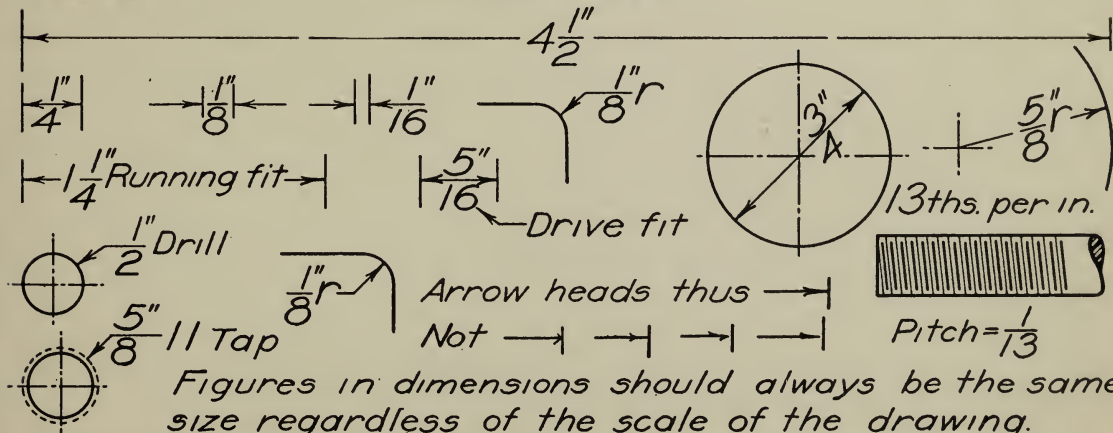
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DIMENSIONS



Single figures $\frac{1}{8}$ " high. Fractions $\frac{1}{4}$ " high. Numerator and denominator each $\frac{7}{64}$ ". Figures thus $\frac{5}{8}$ " $\frac{3}{4}$ " $\frac{9}{16}$ " 7" not $\frac{5}{8}$ " $\frac{3}{4}$ " $\frac{9}{16}$ " 1". Notes and dimensions must always read from the bottom or the right side of the plate with respect to the title of the plate.

6ft.-8"

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